Please amend the claims as follows:

1. (currently amended) A method of inhibiting transport of anandamide in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of a compound represented by the following structural formula:

X - Y - Z

and physiologically acceptable salts thereof, wherein:

X is a hydrophobic aliphatic hydrocarbon chain containing from about 4 to about 30 carbon atoms and having one or more nonconjugated cis double bonds in the middle portion of the chain;

Y is selected from the group consisting of amide and ester radicals; and

Z is selected from the group consisting of hydrogen, lower alkyl, hydroxy substituted lower alkyl, hydroxy substituted lower alkyl forming a ring with the Y group amide radical, aryl, hydroxy substituted aryl, a non-aromatic ring system of 4 to 8 carbon atoms containing one or more heteroatoms such as oxygen or nitrogen with the Y moiety amido nitrogen forming part of the ring structure or a hydroxy substituted non-aromatic ring system of 4 to 8 carbon atoms containing one or more heteroatoms such as oxygen or nitrogen with the Y moiety amido nitrogen forming part of the ring structure; with the proviso that,

~~wherein~~ if X contains from 18 to 21 carbon atoms and Y is an amide radical, then Z cannot be hydrogen ~~if Y is an amide radical~~.

2. (original) The method of claim 1 wherein Z is a polar nonionizable group containing a hydroxy moiety at its distal end.

3. (original) The method of claim 1 wherein Y is an amide radical.

4. (original) The method of claim 1 wherein Y is an ester radical.

5. (original) The method of claim 1 wherein X has two or more nonconjugated double bonds.

6. (original) The method of claim 1 wherein X has at least four nonconjugated double bonds.

7. (original) The method of claim 1 wherein Z is a hydroxy substituted aryl group.

8. (previously presented) The method of claim 1 wherein Z includes an alkyl group alpha to the amido nitrogen.

9. (original) The method of claim 1 wherein Z is an (S) isomer of a chiral molecule.

10. (previously presented) A method of modifying the rate of anandamide inactivation in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of an inhibitor that targets an individual's or animal's anandamide transporter, said transporter being a protein exhibiting a temperature-dependent, saturable, high affinity and Na^+ -independent mechanism, wherein the inhibitor excludes a compound represented by the following structural formula:

X - Y - Z

and physiologically acceptable salts thereof, wherein:

X is a hydrophobic aliphatic hydrocarbon chain containing from 18 to 21 carbon atoms and having one or more nonconjugated cis double bonds in the middle portion of the chain;

Y is an amide radical; and

Z is hydrogen.

11. (original) The method of claim 10 wherein the transporter-targeted inhibitor is an anandamide analog having a nonionizable head group containing a hydroxyl moiety at its distal end and a hydrophobic tail having a bent U-shaped stereochemical configuration.

Cancel claims 12-20.

21. (previously presented) The method of claim 1 wherein X is a hydrophobic aliphatic hydrocarbon chain containing 19 carbon atoms and having 4 nonconjugated cis double bonds in the middle portion of the chain and Y is an amide radical.

Cancel claim 22.

23. (new) A method of inhibiting transport of anandamide in an individual or animal comprising administering to the individual or animal a therapeutically effective amount of a compound represented by the following structural formula:

X - Y - Z

and physiologically acceptable salts thereof, wherein:

X is a hydrophobic aliphatic hydrocarbon chain containing from about 4 to about 30 carbon atoms and having one or more nonconjugated cis double bonds in the middle portion of the chain;

Y is selected from the group consisting of amide and ester radicals; and

Z is selected from the group consisting of hydrogen, lower alkyl, hydroxy substituted lower alkyl, hydroxy substituted lower alkyl forming a ring with the Y group amide radical, aryl, hydroxy substituted aryl, a non-aromatic ring system of 4 to 8 carbon atoms containing one or more heteroatoms such as oxygen or nitrogen with the Y moiety amido nitrogen forming part of the ring structure or a hydroxy substituted non-aromatic ring system of 4 to 8 carbon atoms containing one or more heteroatoms such as oxygen or nitrogen with the Y moiety amido nitrogen forming part of the ring structure; with the proviso that,

if X contains from 18 to 21 carbon atoms and Y is an amide radical, then Z cannot be hydrogen; and

if X is an arachidonic acid radical and Y is an amide radical than Z cannot be selected from the group consisting of 3- hydroxyphenyl or 4-hydroxyphenyl.